CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Loren Sasser rebuild of an existing irrigation head gate diversion on Deep Creek. This project will be authorized under a lease improvement request form.
Proposed Implementation Date:	Summer 2011
Proponent:	Loren Sasser, PO Box 520, Choteau, MT 59422
Location:	SENESW, Section 16, T23N, R5W
County:	Teton
Trust:	Common Schools

I. TYPE AND PURPOSE OF ACTION

Loren Sasser has requested to rebuild a head gate diversion that is located on Deep Creek. The dam for the diversion is in poor shape and may fail at any time. The dam consists of old concrete slabs and is not fish friendly. The Teton River Watershed Group (TRWG) has been awarded a grant to fund the project. The grant is currently not funded, but once the budget is approved by Congress, the necessary monies will be available to fund the project. The DEQ contract is still pending and once it is approved, TRWG will proceed with the required engineering. The new dam will be constructed out of rock that is 3' to 4' in diameter. The dam will also consist of 2 or 3 step pools that will allow fish to travel up and down Deep Creek. There are also damaged portions of the diversion that will be rebuilt as they are leaking. The entire project area will be revegated with grass and native willow trees. The head gate will also be replaced as it no longer functions correctly. The head gate diversion provides water to a state owned water right and to others for private water rights.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

Loren Sasser-Proponent, Surface Lessee, Lease #7322
DNRC-Surface Owner
TRWG-Proponent
FWP-Proponent
Teton County Conservation District-Proponent

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

DEQ-Permitting Agency
Teton County Conservation District-3/10 Permit

3. ALTERNATIVES CONSIDERED:

Alternative A (No Action) – Deny Loren Sasser permission to rebuild the head gate diversion.

Alternative B (the Proposed action) – Grant Loren Sasser permission to rebuild the head gate diversion.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Soils at the proposed project site are mixed do the action of Deep Creek and vary from Clayey to Rocky. The topography is mainly flat. Equipment will cause localized areas of soil compaction and will disturb the soil were the new dam and head gate will be placed. Reclamation requirements are set by the TRWG and will be in compliance with all regulations. The area will be reseeded with grass and native willow trees. Cumulative impacts on soil resources are not expected as the new dam and head gate diversion will eliminate the stream bank erosion that is currently taking place.

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5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

There are numerous water rights associated with this tract, see the below table.

Water Right Number	Owner	Flow Rate
410113600	State of Montana Board of Land Commissioners	204.00 GPM
41016712800	Robert Stephens Jr.	14.14 CFS
4101904900	Loren Sasser	7.80 CFS
4101904900	Nancy Sasser	7.80 CFS
41030017448	FWP	18.00 CFS

These water rights will be impacted by the proposal by giving a more reliable dam and head gate diversion to serve them. The project will result in improved water quality by reducing the sediment entering Deep Creek. The project will also reduce erosion and increase the water efficiency of the irrigation system. Other water quality and/or quantity issues will not be impacted by the proposed action.

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6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

The proposed action will not impact the air quality.

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7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

Vegetation will be minimally impacted as the new dam and head gate diversion is replaced. The vegetation consists primarily of native species. Noxious and annual weeds within the proposed construction areas are a concern, but this concern will be mitigated as the proponents are responsible for controlling weeds within the construction areas. Native willows will be transplanted to stabilized diversion and stream backs in the construction area. Cumulative impacts on the vegetative resources are not expected as the proposed construction areas will be reclaimed and reseeded per TRWG's revegetation design.

A review of Natural Heritage data through the NRIS was conducted and there were no plant species of concern noted or potential species of concern noted on the NRIS survey.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The area is not considered critical wildlife habitat. However, this tract provides habitat for a variety of big game species (mule deer, whitetail deer, pronghorn antelope), predators (coyote, fox, badger), upland game birds (sharp tail grouse, Hungarian partridge), other non-game mammals, raptors and various songbirds. The proposal does not include any land use change which would yield changes to the wildlife habitat. The proposed action will not impact wildlife forage, cover, or traveling corridors. Nor will this action change the juxtaposition of wildlife forage, water, or hiding and thermal cover. Wildlife usage is expected to return to "normal" (pre-action usage) following the completion of the project. The project will benefit fish by allowing them to move over the new dam by the use of the step pools. The proposed action will have long-term positive effects on existing wildlife species and/or wildlife habitat.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

There are no threatened or endangered species, sensitive habitat types, or other species of special concern associated with the proposed project area. At this time, no known unique, endangered, fragile or limited environmental resources have been identified within the proposed project area.

A review of Natural Heritage data through the NRIS was conducted for T23N, R5W. There were five species of concern and three potential species of concern noted on the NRIS survey: Birds—Golden Eagle, Clark's Grebe, Ferruginous Hawk, Bobolink, and Swainson's hawk. Fish-Brook Stickleback and Brassy Minnow. Mammals-Gray Wolf. This particular tract of native rangeland does not contain many, if any of these species. If any are present, they will be dispersed into the surrounding permanent cover and return to the project area once it is completed.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

Patrick Rennie, DNRC archaeologist, was contacted and he stated that due to the diversion area being previously disturbed, no historical, archaeological, or paleontological resources would be present.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

Rebuilding the head gate diversion will affect the aesthetics of the land in a positive manner by replacing the failing structures with new environmentally friendly structures. It will lead to a decrease in erosion of the soil resources on Deep Creek as the streambed will be stabilized.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

The demand on environmental resources such as land, water, air, or energy will not be affected by the proposed action. The proposed action will not consume resources that are limited in the area. There are no other projects in the area that will affect the proposed project.

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

There are no other projects or plans being considered on the tract listed on this EA.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:
Identify any health and safety risks posed by the project.

The proposed project will not change human safety in the area.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:
Identify how the project would add to or alter these activities.

The results of this project will positively impact agriculture activities by allowing for a more efficient use of water to irrigate the agricultural ground.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:
Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

This project will create a limited number of short term construction jobs to complete the project.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:
Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

The proposed action will slightly add to the tax revenue.

18. DEMAND FOR GOVERNMENT SERVICES:
Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services

This project is of a small scale and being funded by TRWG. There will be no excessive stress placed of the existing infrastructure of the area.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:
List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

The proposed action is in compliance with State and County laws. No other management plans are in effect for the area.

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:
Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

This proposed project area is accessible by a two-track trail through deeded land and generally has low recreational value. The tract is legally accessible via Deep Creek and the proposed action is not expected to impact general recreational and wilderness activities on this state tract.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:
Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing

The proposal does not include any changes to housing or developments.

No direct or cumulative effects to population or housing are anticipated.

22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

There are no native, unique or traditional lifestyles or communities in the vicinity that would be impacted by the proposal.

23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposed action will not impact the cultural uniqueness or diversity of the area.

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

Positive impacts are expected as the project will allow fish to move freely up and down Deep Creek. The project will also reduce erosion and allow for a more efficient use of water out of the head gate diversion. The project will not affect the long-term viability of grazing on the tract. This project is authorized under the improvement request form.

EA Checklist Prepared By:	**Name:** Tony Nickol	**Date:** April 27, 2011
	Title: Land Use Specialist, Conrad Unit, Central Land Office	

V. FINDINGS

25. ALTERNATIVE SELECTED:

Alternative B (the Proposed action) – Grant Loren Sasser permission to rebuild the head gate diversion.

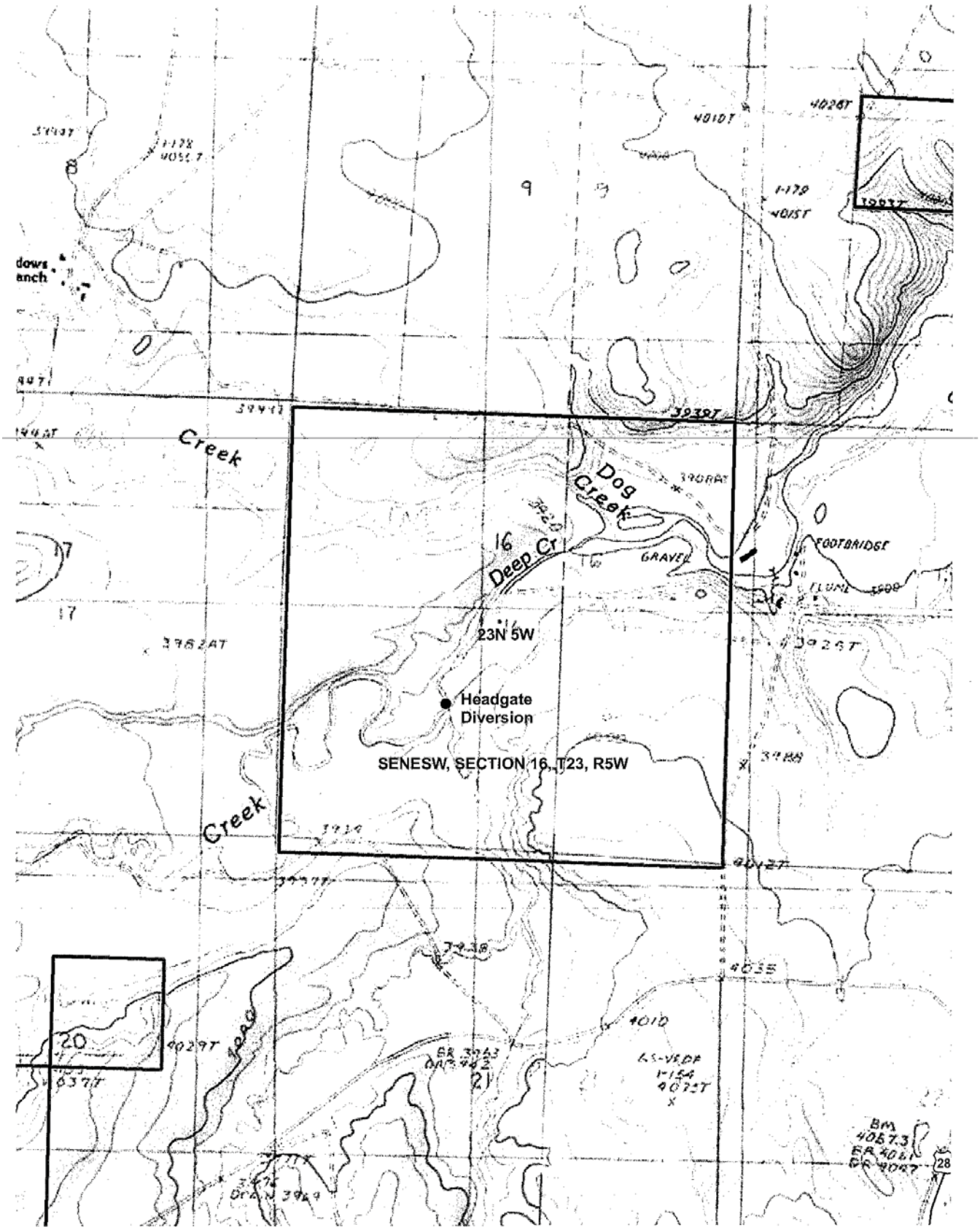
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

This project will replace a failing irrigation diversion and head gate on Deep Creek. The structure design will allow for fish to freely move up and down stream. Long term soil erosion and sediment entering Deep Creek will be decreased. Disturbed areas will be reclaimed and reseeded in accordance with specifications outlined in this EA. No negative environmental impacts are expected.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

EA Checklist Approved By:	**Name:**	Erik Eneboe
	Title:	Conrad Unit Manger, CLO, DNRC
Signature: 		**Date**: May 9, 2011


Creek
Dog Creek
Deep Cr
FOOTBRIDGE
GRAVEL
23N 5W
Headgate Diversion
SENESW, SECTION 16, T23, R5W
Creek
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17
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